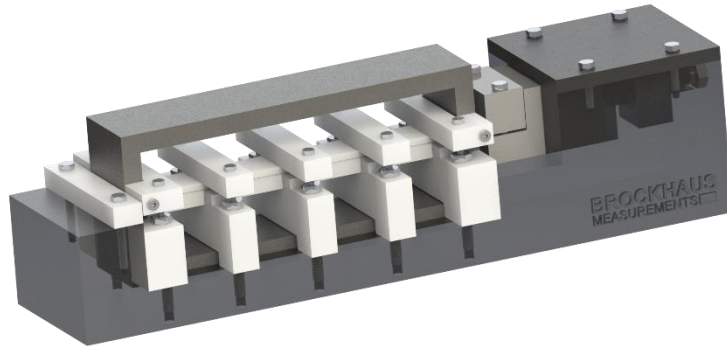


SST under Stress and Temperature System



- **System Description:**

A single strip tester (SST) is used to measure loss of an Epstein strip under tensile and compressive stress at the environment of a wide range of temperatures from -40°C to 300°C. The whole body of the system apart of the sample and two yokes is made of non-magnetic stainless steel and ceramic parts. Moreover a copper cable with ceramic insulation, withstanding high temperatures up to 300°C is used for the primary and secondary turns which are wound around the sample. An environmental chamber with a temperature control loop is used to supply and control the wide range of temperatures in the sample during magnetisation.

- **Magnetization Conditions**

- Sinusoidal flux density
Frequency range: 10 Hz - 20 kHz
Peak of flux density up to 2.3 T (sample dependent)
- PWM
Switching frequency of 100 kHz
- High Harmonics and Free Curves

- **Measurement Environment**

- Programmable temperature range from -40°C to +300°C

- **Sample Type:**

- Silicon Iron Electrical Steel with thickness of 0.2 - 0.5 mm
- Sample size 305mm x 30mm

- **Additional Sensors**

- Thermocouple
- Strain Gauge

